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Belief and Animal Spirits in Hume's *Treatise*¹

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Abstract

The terminology Hume uses for his descriptions of the sentiments characterising belief -- the "force," "vivacity" and "steadiness" of conception -- is derived from the contemporary physiology of animal spirits and brain traces in the style of Malebranche. In this paper I show how studying the ways those terms were used within Malebranchean physiology provides a key to Hume's usage. In particular, I suggest that as in the accounts of the motions of animal spirits so too in Hume's descriptions of belief there is a crucial difference between "force" and "vivacity," which refer to intensity, and "steadiness," which is connected with repeated experience and custom. Hume's phenomenological descriptions of belief in terms of force and vivacity are substantiated with vignettes from common life and sociability, and account for the sentimental raw materials of belief on which experience and custom exercise their stabilizing and calibrating action.

*The brain contains ten thousand cells,
in each some active fancy dwells.*
Matthew Prior

The aim of this essay is to explore Hume's view that belief is a particular manner of conceiving what is believed—the difference between an idea we believe in and one which is merely entertained lies in their "force," or "vivacity," or "steadiness." This theory is commonly regarded as problematic, indeed as "beyond redemption," to use Jonathan Bennett's typically brisk assessment.² To mention only the most obvious difficulties, how can Hume account, on the basis of such a theory, for our ability to hold calm beliefs, or even beliefs of which we are hardly aware at all?

I first present Hume's view that belief is a particular force, liveliness and steadiness of conception, and explore the similarities and connections between belief and impressions, which are also characterized by a special force and liveliness. I then consider the possible roles in Hume's investigations of the human mind of the Malebranchean physiology of animal spirits and brain traces. The force and liveliness terminology is the typical idiom of this brand of animal economy. But in the pages of the *Treatise* it is divorced from its original application to bodily events, and is used instead in the service of Hume's attempted phenomenological descriptions of belief as a sentiment.

¹ I am grateful to Nick Jardine, Andrea Branchi, Susan James, Peter Kail, Peter Lipton, Emilio Mazza, Sandy Stewart, and the participants in the conference "Hume Studies in Britain" (Edinburgh, September 2002) for their generous advice and encouragement.

² Jonathan Bennett, *Locke, Berkeley, Hume: Central Themes* (Oxford: Clarendon Press, 1971), 294.

The question then is: how successful was Hume in transforming the physiological idiom into a language for the narration of feeling and experience? And what is the role of this narration within his theory of belief?

Force, vivacity and steadiness

For a start, what exactly does Hume mean when he talks about the force, vivacity, liveliness, steadiness, etc. of belief? These terms do not, in fact, all mean even the same *sort* of thing. They are easily split into three groups with not much in common, namely one including force, strength, and vigour; a second vivacity, liveliness, vividness and brightness; and finally steadiness, solidity and firmness.³ Consider the following passage:

an opinion or belief is nothing but an idea, that is different from a fiction, not in the nature, or the order of its parts, but in the *manner* of its being conceiv'd. But when I wou'd explain this *manner*, I scarce find any word that fully answers the case, but am oblig'd to have recourse to every one's feeling, in order to give him a perfect notion of this operation of the mind. An idea assented to *feels* different from a fictitious idea, that the fancy alone presents to us: And this different feeling I endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firmness*, or *steadiness*.⁴

So belief is not a distinct perception, but an act of the mind or mode of presentation of a perception. When we conceive an idea there is also, in our mind, a second-order internal “act” or “feeling” having to do with whether the idea in question is believed or merely entertained; and this feeling is characterized as superior force, vivacity, solidity, and so on. Hume suggests that with “this variety of terms, which may seem so unphilosophical” he is no more than pointing out to his reader a certain quality of believed ideas. And indeed the groups “force” and “vivacity,” as they are used for the first introduction of belief in the *Treatise*, seem to suggest that belief is some sort of intensity of the believed idea. This also is the most plausible reading of the comparison Hume suggests between belief and the intensity of a colour:

When you wou'd any way vary the idea of a particular object, you can only increase or diminish its force and vivacity. If you make any other change on it, it represents a different object or impression. The case is the same as in colours. A particular shade of any colour may acquire a new degree of liveliness and brightness without any further

³ See the analysis of these terms in the excellent article by Stephen Everson, “The Difference between Feeling and Thinking,” *Mind* 97 (1988): 401–413.

⁴ David Hume, *A Treatise of Human Nature*, ed. L. A. Selby-Bigge. 2nd edition, revised and variant readings by P. H. Nidditch (Oxford: Clarendon Press, 1978), 629. All citations from the *Treatise* are from this edition; they will appear in the text as follows: (T629).

variation. But when you produce any other variation, 'tis no longer the same shade or colour. (T96)

Here the “shade or colour” correspond to the mental content, the object or impression copied by the idea; and belief has nothing to do with that. Belief is not a mental content, it is the “force and vivacity,” or “degree of liveliness and brightness” of that content—its intensity. This is the Humean theory of belief which Bennett regarded as hopeless. As I mentioned at the outset, even the obvious fact that we do routinely hold beliefs to which we pay hardly any attention is enough to create problems for it. And as well as believing unremarkable and boring ideas we also entertain, without believing them, ideas which are very lively indeed: as Kames pointed out at the time in his response to the *Treatise*, “poetry and painting produce lively ideas, but they seldom produce belief”—in fact, “can any man doubt ... that poetry makes a stronger impression than history?”⁵ In other words, we are also able to distinguish between holding calm beliefs, and merely entertaining lively ideas. How does Hume account for this flexibility of the mind in interpreting the force and vivacity of ideas sometimes as belief, and sometimes as mere vividness of imagination? Finally, to borrow again from Bennett’s philosophical prose, I can easily both believe that the Sahara is warm and entertain the thought that it is extremely hot.⁶ How does Hume account for the mind’s ability to distinguish between calm, absent-minded beliefs and exciting figments of the imagination?

It may seem tempting to answer the questions above by admitting that Hume did not think things through. But that would, I think, be hasty: Hume was well aware of these difficulties. Issues such as the different impacts on readers’ feelings of historical works and poetical fictions, the ways in which writers exploited such differences to make their works more attractive or more persuasive, and the causes and consequences of possible confusions on the readers’ part, were topical and hotly debated by his contemporaries.⁷ Moreover, as I mentioned, Kames made it sure that he would not forget about them. The tormented page of the Appendix which I have quoted above is, in fact, part of his attempt to respond to Kames’s strictures. This response we are now to examine carefully. As we shall see, it is crucially important that the third group of terms—steadiness, solidity and firmness—does not invite an interpretation in terms of intensity. Before focussing on steadiness, however, I propose to explore in more detail Hume’s uses of the force and liveliness groups of terms, and the relations that such uses reveal between belief and sense impressions.

⁵ Henry Home, Lord Kames, *Essays on the Principle of Morality and Natural Religion* (Edinburgh, 1751), 222–23; but see the whole of his Essay I, “Of Belief,” in Part 2, 221–30.

⁶ Bennett, *Locke, Berkeley, Hume*, 294; see the comments on this in Everson, “Difference,” 402–403.

⁷ See my “Quixotic Confusions and Hume’s Imagination,” in Peter Kail and Marina Frasca-Spada, eds. *Impressions of Hume* (Oxford: Oxford University Press, forthcoming).

Force, vivacity, and the world out there

In Book 1 of the *Treatise* “force” and “vivacity” appear in connection with the distinctions between impressions and ideas, between ideas of the memory and of the imagination, and between believed and merely entertained ideas.⁸ This is how Hume introduces impressions and ideas in page 1 of the *Treatise*:

the difference betwixt these consists in the degrees of force and liveliness, with which they strike upon the mind, and make their way into thought or consciousness. Those perceptions, which enter with most force and violence, we may name *impressions*.... By *ideas* I mean the faint images of these in thinking and reasoning. (T1)

“Force,” “liveliness” and “violence” are indeed so typical, and so often repeated by Hume in connection with impressions, that many readers regard them as defining the only or main difference between impressions themselves and the ideas which reproduce them in thought. Similarly, ideas of memory “are much more lively and strong than those of the imagination ... the former faculty paints its object in more distinct colours, than any which are employ’d by the latter.” Ideas of memory “flow in upon the mind in a forcible manner,” while those of the imagination are “faint and languid” (T9). It is important, however, to note that in the cases both of impressions *vs.* ideas and of ideas of memory *vs.* ideas of the imagination, force and liveliness, however important, are by no means all there is to the distinction. As well as being more lively than the corresponding ideas, impressions are the originals from which those ideas are copied; they are non-representational, while ideas do represent former impressions; and they are innate, while ideas are acquired through experience. Similarly, the main feature of memory is not the force and liveliness of its ideas, but rather that, contrary to the imagination, as well as the ideas themselves it also preserves “their order and position” (T9–10). Evidently “force” and “liveliness” are used as the phenomenological markers, convenient because readily available to introspection, of those perceptions which, were Hume prepared to talk in Lockean or in commonsense realist terms, he would describe as taking place in the presence of something out there, or as being caused by a real object and mirroring it. So the key to making sense of them, and hence of belief, is to be found as close as Hume’s frame of reference will allow us to go to the world out there—that is, in sense impressions.⁹

⁸ In Book 2 they are of course crucial for the descriptions of the passions. It may be worth remembering that in the treatment of passions there appears a problem corresponding to that of calm beliefs, namely that of calm passions which are, however, strong enough to prevail over violent passions (T417–19): see the interesting discussion of Jane L. McIntyre, “Hume’s Passions: Direct and Indirect,” *Hume Studies* 26 (2000): 77–86.

⁹ I have presented in detail my view that Hume’s sense impressions are non-intentional and that they are the objects of our experience in “Hume on Sense Impressions and Objects,” in Michael Heidelberger and Friedrich Stadler, eds., *History of Philosophy of Science: New Trends and Perspectives*, Vienna Circle Institute Yearbook (Dordrecht, Boston and London: Kluwer Academic Publishers, 2001), 13–24. For a classic discussion with a very different emphasis see Barry Stroud, *Hume*

Hume is explicit in stating a fundamental connection between belief and impressions. For example he says that “the objects of conviction and assurance ... approach nearer to the impressions, which are immediately present to us” (T624–25). Moreover, they have a similarly powerful practical impact:

Wherever we can make an idea approach the impressions in force and vivacity, it will likewise imitate them in its influence on the mind; and *vice versa*, where it imitates them in that influence ... this must proceed from its approaching them in force and vivacity. Belief, therefore, since it causes an idea to imitate the effects of the impression, must make it resemble them in these qualities, and is nothing but *a more vivid and intense conception of any idea*. This ... may give us a notion after what manner our reasonings from causation are able to operate on the will and the passions. (T119–20)

So a believed idea is able to operate on the will and the passions in virtue of its similarity to sense impressions in terms of “vividness” and “intensity” of conception.¹⁰ In certain pages Hume even seems to suggest that the force and liveliness of impressions actually *is* belief:

the *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present ... To believe is in this case to feel an immediate impression of the senses, or a repetition of that impression in the memory. 'Tis merely the force and liveliness of the perception, which constitutes the first act of judgment, and lays the foundation of that reasoning, which we build upon it, when we trace the relation of cause and effect. (T86)

Here the “force and liveliness” of sense impressions is the first actuation of reason in judgement, being the starting point of all causal reasoning—conversely, “all probable reasoning is nothing but a species of sensation” (T102).¹¹ As soon as I have an impression of the “cause,” I expect its usual “effect,” that is, I conceive it in a strong and lively manner. My expectation is the basic act of “probable reasoning,” and consists of the force and vivacity

(London: Routledge and Kegan Paul, 1977), 27–33. See also the recent Cass Weller, “Why Hume is a Direct Realist,” *Archiv für Geschichte der Philosophie* 83/3 (2001): 258–85.

¹⁰ See Everson, “Difference,” esp. 407–408 (strangely underestimated by Stroud, *Hume*, 74). Everson in fact finds that the connection between impressions and beliefs is so close that there is a danger of not being able to differentiate between them at all—for his solution see *idem*, “Difference,” 410–413.

¹¹ This close connection between sense impressions and belief is a long-term conviction of Hume’s. See Part 3 of *Dialogues concerning Natural Religion*, ed. Norman Kemp Smith (London: Thomas Nelson and Sons, 1947), 154, where Cleanthes observes: “Consider, anatomise the eye; survey its structure and contrivance; and tell me, from your own feeling, if the idea of a contriver does not immediately flow in upon you with a force like that of sensation.”

which the impression of the first event leads to the idea of the second which is associated with it in my mind. Whatever Hume means by force and vivacity, they can—crucially—be transferred from one perception to another:

when any impression becomes present to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity.... when the mind is once enliven'd by a present impression, it proceeds to form a more lively idea of the related objects, by a natural transition of the disposition from the one to the other. The change of the objects is so easy, that the mind is scarce sensible of it, but applies itself to the conception of the related idea with all the force and vivacity it acquir'd from the present impression. (T98–99)

So the present impression is the provider of the liveliness and strength of conception which is the concrete sensational (or sentimental) material of belief. In this sense it is necessary—“absolutely requisite,” to use Hume’s terms—for belief to occur: “belief is a more vivid and intense conception of an idea, proceeding from its relation to a present impression” (T103).

Belief and the animal spirits

Focussing on force and liveliness, as I have done so far, highlights the similarities and connections between (sense) impressions and believed ideas. But there are also very remarkable differences. In particular, while belief is one of the major topics in Book 1 of the *Treatise*, impressions, after being introduced in the first few pages, are hardly discussed at all. Impressions of reflections, or passions, are the subject of Book 2. Sense impressions are deliberately left out because they constitute, according to Hume, a topic for natural philosophers and anatomists—as he puts it, “the examination of our sensations belongs more to anatomists and natural philosophers than to moral” (T8). To Hume the “science of human nature” or “science of man” was, as he called it, an “anatomy of the mind” which, however, did not include natural philosophy and anatomy proper.

But many of Hume’s contemporaries saw things differently. For Nicolas Malebranche the “science de l’homme” has as its main focus the soul. In his *La Recherche de la vérité* of 1674–75 the physiological accounts of sense impressions and thought processes are omnipresent and of fundamental importance. Malebranche’s detailed descriptions of the workings of the body are aimed at accounting for the ways in which the soul is bound and conditioned by its dependence on the body; and in his pages the explanations of mental or passional states are in mechanistic terms of flow or agitation of animal spirits, brain fibres, impressions and traces on the brain’s substance, and so on. The fundamental importance of Malebranche’s work for eighteenth-century British culture has recently started to be recognized. In *Thinking Matter* John Yolton has reconstructed in detail the reception of Malebranchian physiology in the works of metaphysicians and moral

philosophers, natural philosophers and medics. He also points out that it was massively present in the pages of Chambers's *Cyclopaedia*.¹² Here, as well as having entries specifically devoted to them, spirits and brain traces appear, often accompanied by open references to Malebranche and quotations from his *Recherche*, in such other entries as "Brain," "Circulation (of spirits)," "Passion," "Habit," "Memory," "Error," "Imagination"—the entry on the imagination being, in fact, a near-literal translation of a section of Malebranche's *Recherche*.¹³

Chambers's assessment of the theory of animal spirits is revealingly cautious:

The existence of animal spirits is controverted: but the infinite use they are of in animal oeconomy and the exceedingly lame account we should have of any of the animal functions without them, will still keep the greatest part of the world on their side. And in effect, the learned Boerhaave has gone a good way towards a demonstration of their reality.¹⁴

On one point this qualified endorsement of the theory of animal spirits leaves us in no doubt: they play major roles in the "science of human nature" as it was practised in early eighteenth-century Britain. "Moral physiology," to use John Sutton's apt name for it,¹⁵ was a very important element of the eighteenth-century culture of sensibility: by the time Hume was writing his *Treatise* animal spirits, brain traces and imaginary dissections of the brain were popular enough to make their appearance in works addressing wide readerships. As well as in the *Cyclopaedia* they are to be found, for example, in Addison's essays in *The Spectator*.¹⁶ They were routinely evoked even in novels and poems, where, as another recent reader, Ann van Sant, has put it,

¹² John W. Yolton, *Thinking Matter: Materialism in Eighteenth-Century Britain* (Oxford: Blackwell, 1984), "The Physiology of Thinking and Acting," 152–89, esp. 162–72; Yolton considers, among others, the works of Bernard de Mandeville, George Cheyne, John Jackson, Benjamin Martin, Samuel Collier and Isaac Watts. See also the seminal discussions by Robert F. Anderson, *Hume's First Principles* (Lincoln: University of Nebraska Press, 1966), esp. ch. 13, "Material Foundations of Knowledge," 111–132; and by John P. Wright, *The Sceptical Realism of David Hume* (Manchester: Manchester University Press, 1983). Useful materials can also be found in Charles J. McCracken, *Malebranche and British Philosophy* (Oxford: Clarendon Press, 1983); and Stuart Brown, "The Critical Reception of Malebranche, from His Own Time to the End of the Eighteenth Century," in Steven Nadler, ed., *The Cambridge Companion to Malebranche* (Cambridge: Cambridge University Press, 2000), 262–87.

¹³ As noted by Wright, *Sceptical Realism*, 189 and 235, n. 4. The relevant section of the *Recherche* is Book 2, Part 1, ch. 1.

¹⁴ Ephraim Chambers, *Cyclopaedia* (London, 1738), "Spirit." For a similar attitude see Bernard Mandeville's *Treatise of the Hypochondriack and Hysterical Passions* (London, 1711), where the existence of the animal spirits is unambiguously stated, but in a dialogue and in response to a sceptical query by one of the characters.

¹⁵ John Sutton, *Philosophy and Memory Traces. Descartes to Connectionism* (Cambridge: Cambridge University Press, 1998), for example 46–49 and, specifically on Malebranche, 195–97.

¹⁶ In *The Spectator* see, for example, no. 275 for an imaginary dissection of a beau's brain, and no. 417 for the animal spirits.

physiological language “provided a means of imagining and explaining interior experience.”¹⁷ Now, it is well known that Hume regarded Malebranche’s *Recherche* as a work of major importance and as an antecedent to his own investigations.¹⁸ He was also familiar with a number of other, more recent works in which animal spirits and brain traces made their appearance—Addison’s and Chambers’, for example.¹⁹ It is tempting to think that the avoidance of physiological accounts in his pages is an oddity calling for an explanation!

The animal spirits in Hume’s *Treatise*

In fact, on one occasion Hume does offer a detailed explanation of a mental phenomenon in terms of animal spirits and brain traces. The issue is our tendency to confuse ideas which are associated. Hume’s presentation is cautious: he announces that the importance and consequence of this tendency is such that it is worth, just for once, to pause briefly to examine its causes; but, he warns, “we must distinguish exactly betwixt the phaenomenon itself, and the causes, which I shall assign for it.... The phaenomenon may be real, tho’ my explanation be chimerical” (I60). He then proceeds to introduce his own “imaginary dissection of the brain,” an impeccably well informed

¹⁷ Ann J. van Sant, *Eighteenth-Century Sensibility and the Novel: The Senses in Social Context* (Cambridge: Cambridge University Press, 1993), 11–12. The animal spirits are also to be found in, for instance, *Tom Jones*, *Tristram Shandy* (see, e.g., Book 1, chs. 1–2), and Henry Brooke’s long philosophical poem on *Universal Beauty* of 1735. On the importance of physiology for the literature of sensibility see G. J. Barker-Benfield, *The Culture of Sensibility: Sex and Society in Eighteenth-Century Britain* (Chicago and London: Chicago University Press, 1992), ch. 1, “Sensibility and the Nervous System” (esp. 15–23); G. S. Rousseau, “Nerves, Spirits, and Fibres: Towards Defining the Origins of Sensibility,” *Blue Guitar* 2 (1976): 125–53; and Robert F. Brissenden, *Virtue in Distress: Studies in the Novel of Sentiment from Richardson to de Sade* (New York: Harper and Row, 1974), 37–48. Also Christopher Lawrence, “The Nervous System and Society in the Scottish Enlightenment,” in Barry Barnes and Steven Shapin, eds., *Natural Order: Historical Studies of Scientific Culture* (London: Sage, 1979), 19–39. Among the intellectual pursuits whose physiology was the object of much attention there was, of course, reading itself: see Adrian Johns, “The Physiology of Reading in Restoration England,” in James Raven et al., eds., *The Practice and Representation of Reading in England* (Cambridge: Cambridge University Press, 1996), 138–61, and “The physiology of reading,” in Marina Frasca-Spada and Nick Jardine, eds., *Books and the Sciences in History* (Cambridge: Cambridge University Press, 2000), 291–314.

¹⁸ On Hume and Malebranche see C. W. Doxey, “Hume’s Relation to Malebranche,” *Philosophical Review* 25 (1916): 692–710; Ralph W. Church, “Malebranche and Hume,” *Revue internationale de philosophie* 1 (1938): 143–61; and, more recently: Peter Jones, *Hume’s Sentiments. Their Ciceronian and French Context* (Edinburgh: The University Press, 1982); Wright, *Sceptical Realism*; Luigi Turco, *Lo scetticismo morale di David Hume* (Bologna: Editrice CLUEB, 1984), 55–56; John P. Wright, “Hume’s Criticism of Malebranche’s Theory of Causation: a Lesson in the Historiography of Philosophy,” in Stuart Brown, ed., *Nicolas Malebranche, His Philosophical Critics and Successors* (Assen/Maastricht: Van Gorcum, 1991), 116–30; G. Gori, “Da Malebranche a Hume: modelli della mente umana, immaginazione, giudizi naturali. Un percorso storiografico,” in Antonio Santucci, ed., *Filosofia e cultura nel settecento britannico, vol. 1—Fonti e connessioni continentali; John Toland e il deismo* (Bologna: Il Mulino, 2000), 113–34; and, with more emphasis on Malebranche than on Hume, Steven Nadler, “Malebranche on causation,” in Nadler, ed., *Cambridge Companion to Malebranche*, 112–38 (the comparison with Hume is in 133–36).

¹⁹ No. 412 of *The Spectator* is cited in Book 2 of the *Treatise* (I284). On Hume as a reader of Chambers’s *Cyclopaedia* see James Force, “Hume’s Interest in Newton and Science,” *Hume Studies* 14 (1988): 166–216.

rehearsal of the common animal spirits story. Confusion, he says, arises due to the uncertainty of the spirits' movement:

whenever [the mind] dispatches the spirits into that region of the brain, in which the idea is plac'd; these spirits always excite the idea, when they run precisely into the proper traces, and rummage that cell, which belongs to the idea. But as their motion is seldom direct, and naturally turns a little to the one side or the other; for this reason the animal spirits, falling into the contiguous traces, present other related ideas in lieu of that which the mind desir'd at first to survey. This change we are not always sensible of; but continuing still the same train of thought, make use of the related idea, which is presented to us, and employ it in our reasoning, as if it were the same with what we demanded. This is the cause of many mistakes and sophisms in philosophy (T60–61).²⁰

This phenomenon is ideally illustrated, he concludes, by “the figures of poets and orators”—should metaphysicians regard such examples as “below their dignity,” they may find equally good ones in their own “discourses” when they fall victims of the common human tendency “to use words for ideas, and to talk instead of thinking in their reasonings” (T61–62). Much could be said of this page's background. Very briefly, it belongs to Hume's intervention on one of the most topical questions of contemporary natural philosophy, that is, the conceivability and existence of a vacuum. So here he is confronting, and disagreeing with, the sacred monsters of his time: Newton, Locke, Samuel Clarke. His reference, in discussing this issue, to such literary frivolities as rhetorical figures is a piece of cheerfully deliberate breaching behaviour, crowned as it is by the wicked poke about the metaphysicians' own confusions of closely related mental items, words and ideas—a case in point being, in his view, precisely that of a vacuum, a mere word which is all too often mistaken for an idea. This is the frame of reference within which Hume introduced his tentative physiological explanation—a mechanistic and Cartesian one which was familiar to all his readers and eminently respectable, and hence, if presented with due caution, ideally suited to lend both additional polemical edge and natural-philosophical respectability to his highly unconventional treatment of empty space.

It has been noticed that, as in the passage above, on practically every occasion that Hume mentions animal spirits and brain traces it is in connection with errors and the mechanism underlying them.²¹ In this he is following

²⁰ Cf. Nicolas Malebranche, *Recherche de la vérité*, Book 2, Part 2, ch. 2 (in *The Search after Truth*, trans. and ed. Thomas M. Lennon and Paul J. Olscamp [Cambridge: Cambridge University Press, 1977], 134–35). Also Chambers, *s.v.* “Trace” and “Error”.

²¹ Turco, *Lo scetticismo*, 64 n. 18. The only occurrence of animal spirits in Hume's *Treatise* not in direct connection with errors is T98–9. On error see also T122–23: “belief not only gives vigour to the imagination, but ... a vigorous and strong imagination is of all talents the most proper to

closely Malebranche's own lead: the "search after truth" which gives Malebranche's work its title is an experience of endless frustration, with more than half of his massive book being devoted to classifying and minutely accounting for the different errors to which are prone our senses, imagination, understanding, inclination, and passions.²² But even when he does mention the animal spirits Hume gives to his own accounts of errors a very different spin. Consider an example of Malebranche's physiological talk, as rendered into English by Chambers:

It may be observed, that the fibres of the brain are more agitated by the impression of objects, **which it perceives by sensation**, than by the course of the animal spirits; and for this reason the soul is more affected with objects, which it perceives by sensation, and which it looks on as present, and capable of giving it pleasure or pain, than by those perceived by *imagination*, which it judges to be distant.—And yet it sometimes happens, that in persons, whose animal spirits are extremely agitated by fasting, waking, **drinking**, a fever, or some violent passion, these spirits move the inward fibres of the brain as forcibly as outward objects do; so that those persons perceive things by sensation, which they should only perceive by *imagination*; **[and they think they see objects before their eyes, which are only in their imaginations.]** for *imagination* and *sensation* only differ from each other, as the greater from the less.²³

procure belief and authority. 'Tis difficult for us to withhold our assent from what is painted out to us in all the colours of eloquence; and the vivacity produc'd by the fancy is in many cases greater than that which arises from custom and experience. We are hurried away by the lively imagination of our author or companion; and even he himself is often a victim to his own fire and genius."

²² Histories of errors were in vogue towards the end of the seventeenth century. For example, Pierre Bayle's first idea for what was to become his *Dictionnaire historique et critique* took precisely the shape of a dictionary of errors. See Anthony Grafton, *The Footnote. A Curious History* (Cambridge, MA: Harvard University Press, 1997), 192–95. While Bayle's project was historical and aimed at producing an alphabetical classification, Malebranche's attempt at a rational classification and explanation of errors in terms of mechanical natural philosophy and animal economy is evidently "philosophical."

²³ Chambers, *Cyclopaedia*, "Imagination." The only alterations by Chambers are two small additions (in bold in the text) and a cut (in bold and square brackets). Cf. Lennon and Olscamp's translation in Malebranche, *Search*, Book 2, Section 1, ch. 1, i, 88: "it should be noted that the fibers of the brain are agitated much more by the impressions of objects than by the flow of spirits. And this is why the soul is much more influenced by external objects that it judges as present and capable of making it feel pleasure and pain than it is by the flow of animal spirits. However, it sometimes happens that persons whose animal spirits are highly agitated by fasting, vigil, a high fever, or some violent passion have the internal fibers of their brains set in motion as forcefully as by external objects. Because of this such people *sense* what they should only *imagine*, and they think they see objects before their eyes, which are only in their imaginations. This shows that with regard to what occurs in the body, the senses and the imagination differ only in degree, as I have just suggested."

So, according to Malebranche, between something sensed and something merely imagined there is only a difference in degree; and if our spirits are in an altered state the boundary between them may be unclear. Hume too acknowledges that altered bodily states can turn force and vivacity into bad indicators of the difference between impressions and ideas—“in sleep, in a fever, in madness, or in any very violent emotions of the soul, our ideas may approach to our impressions” (T2), as he puts it at the beginning of the *Treatise*. His account of the phenomenon is very Malebranchian:

When the imagination, from any extraordinary ferment of the blood and spirits, acquires such a vivacity as disorders all its powers and faculties, there is no means of distinguishing betwixt truth and falshood; but every loose fiction or idea, having the same influence as the impressions of the memory, or the conclusions of the judgment, is receiv'd on the same footing, and operates with equal force on the passions.... Every chimera of the brain is as vivid and intense as any of those inferences, which we formerly dignify'd with the name of conclusions concerning matters of fact, and sometimes as the present impressions of the senses. (T123)

It is evident that, while Malebranche had offered a whole causal explanation of the phenomenon in detailed physiological terms, in Hume's text all physiological underpinnings are carefully left in the background. A passing mention of the “extraordinary ferment of the blood and spirits”—this is as bodily as his language will go—then he glibly moves on to the phenomenological oddity of ideas conceived at such times and the impossibility of distinguishing truth from falsehood, thus introducing the impact on action of “every loose fiction or idea” and of the vivid chimeras of the brain.²⁴

And yet, while pursuing his own kind of “science of human nature” devoid of natural philosophy and anatomy, Hume still cast his attempted phenomenological descriptions of experience in the idiom of the animal spirits and brain traces physiology, transposing that theory into his own explorations of experience. Take the case of “impression” itself. In Malebranche and in Chambers, an impression is a mechanical interaction between an object and “the surface of the fibres of our nerves”—the resulting “agitation” of the

²⁴ For other cases in which the animal spirits appear very discreetly see T98 (it connects “the spirits [being ...] elevated” to the “vigour and vivacity” of an operation of the mind) and T99 (“any new object naturally gives a new direction to the spirits”), both in connection with the transference of vivacity from an impression or idea to such ideas as are related to it; T185 (acts of the mind which are “forc'd and unnatural” correspond to ideas which are “faint and obscure” because “the posture of the mind is uneasy; and the spirits being diverted from their natural course, are not govern'd in their movements by the same laws, at least not to the same degree, as when they flow in their usual channel.”); in the Appendix T630–31; and they are mentioned in T28, T135 (in connection with their materiality), 203, 211, 230, 269, 275 (origin of impressions), 290, etc.

fibres is then “communicated to the brain” where it engraves a “trace,” that is, a “mark” or, again, an “impression.”²⁵ On the other hand, Hume famously wrote that by “impression” he did not intend “to express the manner, in which our lively perceptions are produced in the soul, but merely the perceptions themselves” (T2). Similarly, Malebranche’s “force,” “agitation” and “excitement” of the animal spirits are turned by Hume into the force and liveliness of impressions; and what in Malebranche was the effortless passage of the animal spirits through the oft-used brain fibres of very deeply engraved traces²⁶ is transformed by Hume into the ease with which the mind transfers vivacity from one perception to those habitually associated with it.

There are occasions when a physiological residue of Hume’s transposition almost surfaces in his text. For example, in commenting on the fashion among contemporary “poets” of borrowing names and events from history for their fictional stories, he suggests that in this way they “procure a more easy reception for the whole, and cause it to make a deeper impression on the fancy and affections.” The historical name or event “bestows a force and vivacity” on the fictional materials which in the poem or story are united, and hence, however contingently, associated with it. And this is how he puts it:

The vividness of the first conception diffuses itself along the relations, and is convey’d, as by so many pipes or canals, to every idea that has any communication with the primary one. (T122)

Here the mechanistic physiological model suddenly pops up in the middle of the discourse on the phenomenology of belief, with the transference of belief among ideas being described as if belief were a fluid, in terms of diffusion and with the image of the conveyance of vividness as if through pipes and canals.²⁷

The steadiness of belief

The question with which I started this essay was: how successful is Hume in his attempt to transform the idiom of mechanistic physiology into a language for the description of feeling? If all there is to Hume’s theory of belief were the use of “force” and “liveliness” to refer to sentimental intensity, clearly not much. But it is not, and for two reasons. The first is that, when talking about belief, Hume’s descriptions of what experience feels like in terms of physiological-language-turned-phenomenological are often accompanied by vivid illustrations from everyday life and experience which, in a very typically Humean version of the Scottish moralist style, lend to his discussion the required phenomenological subtlety and insight. This emerges with clarity, for

²⁵ Chambers, *Cyclopaedia*, “Imagination” and “Trace;” and Malebranche, *Recherche*, Book 2, Part 1, ch. 1, 87–88.

²⁶ *Recherche*, Book 2, Part 1, ch. 5, 106.

²⁷ In my interpretation the use of the animal spirits story in the *Treatise* does not, *pace* Wright, commit Hume to realism; in fact it need not even be regarded as a clue to any such commitment. For his attitude to animal spirits is so non-committal that it boils down to a mere reference to, without actual endorsement of, a current theory.

instance, in connection with the phenomenology of memory. Malebranche explains carefully the workings of memory as the result of the differential strength of the action of animal spirits on the substance of the brain, then concludes in passing that by following his mechanistic model “one will have the pleasure of discovering the causes of all these surprising effects of the memory, of which Saint Augustine speaks with so much admiration in the tenth book of his *Confessions*.”²⁸ Hume, by contrast, never offers causal explanations, but rather he chooses to illustrate those surprising effects in a series of vignettes. So we find a man trying to remind another of a shared “scene of action,” and the sudden change of feel when remembrance finally clicks (T628). And we are told of the painter enlivening his recollection of a certain passion before painting it by observing someone actuated by it, and of liars becoming convinced of their own lies by dint of repeating them (T85–86). Also, in the discussion of general terms, we find that “to explain the ultimate causes of our mental actions is impossible;” but that the way general terms work is similar to another of memory’s characteristics, namely the ability of a single word to conjure up a whole run of long-forgotten verses (T123). All these cases are very Malebranchian—they are the sorts of phenomena Malebranche was trying to account for with his physiological discussions. Instead of offering hypothetical natural-philosophical causal explanations of them, Hume prefers to capture them with his peculiar combination of introspective descriptions of sentiments and lively sketches of sociability. We know that the anatomist of the mind who wrote the *Treatise* did not wish to be a painter; but he did address his readers’ understanding by means of a certain amount of drawing.²⁹

The second reason why there is more to Hume’s theory of belief than a description of sentimental intensity has to do with the third group of terms he uses to characterise belief, that which includes steadiness, solidity and firmness.

In his elegant discussion of Hume’s theory of belief John Passmore observed that in the *Treatise* we find, in fact, no less than three different theories, which are presented early on and coexist, somewhat uneasily, to the very end. The first of these theories regards belief as a more vivid and intense way of conceiving an idea; the second connects this believed idea with a present impression, thus rooting belief in experience; while the third regards belief as arising “only from causation” (T107), that is, as the result of probable reasoning, thus highlighting the element of reasonableness of certain beliefs above others. These three theories, Passmore suggests, mark a trend, albeit not a consistent one, “from the doctrine that all beliefs are on the same footing to

²⁸ *Recherche*, Book 2, Part 1, ch. 5, 107.

²⁹ It would be interesting to compare Hume’s use of description and illustration in this case, with the combination of explanation and sentimental description and illustration in his historical writing. On anatomy, painting and drawing in Hume see the M. A. Stewart’s splendid “Two Species of Philosophy: the Historical Significance of the First *Enquiry*,” in Peter Millican, ed., *Reading Hume on Human Understanding: Essays on the First “Enquiry”* (Oxford: Clarendon Press, 2002), 67–95.

the doctrine that some beliefs are much more rational than others.”³⁰ What I have been discussing so far are Hume’s first and second theories of belief. To make sense of steadiness it is necessary to go for a brief venture into the third.

According to this third Humean theory of belief, it is not even strictly speaking the case that belief is one and the same as liveliness. In Hume’s own words:

the great difference in their feeling [of poetical enthusiasm, and a serious conviction] proceeds in some measure from reflexion and *general* rules.... A like reflexion on *general* rules keeps us from augmenting our belief upon every increase of the force and vivacity of our ideas. Where an opinion admits of no doubt, or opposite probability, we attribute to it a full conviction; tho’ the want of resemblance, or contiguity, may render its force inferior to that of other opinions. (T631–32)³¹

Hume never offered a full discussion of the pragmatic logic of his “reflexion and general rules.” He observed that a sceptic would relish how all our attempts to correct our natural gullibility and to rank our beliefs must be guided by something which is as “unphilosophical” as the general rules, and so similar, in its actual working, to prejudice itself. Passmore’s conclusion is in a tone of regret for Hume’s carelessness and apparent lack of serious engagement with this issue. The tasks of exploring the meaning of Hume’s attitude or of trying to reconstruct its reasons are beyond the scope of my discussion. I would only like to suggest that Hume’s hidden reference to the physiology of animal spirits and brain traces may provide us with a clue to belief as steadiness and to the workings of the general rules. Consider another of Hume’s vignettes, that which presents us the two readers of the same book, one of whom believes it to be a romance, and the other a true history:

they plainly receive the same ideas, and in the same order; nor does the incredulity of the one, and the belief of the other hinder them from putting the very same sense upon their author. His words produce the same ideas in both; tho’ his testimony has not the same influence on them. The

³⁰ John Passmore, *Hume’s Intentions*. 3rd edition (London: Duckworth, 1980), 61–63; the quotation is from 61.

³¹ On T632 and the meaning and use of the “general rules” see Thomas K. Hearn, Jr., “‘General Rules’ in Hume’s *Treatise*,” *Journal of the History of Philosophy* 8 (1970): 405–422; W. H. Walsh, “Hume’s concept of truth,” in Godfrey Vesey, ed., *Reason and Reality*, Royal Institute of Philosophy Lectures, vol. 5, 1970–1971 (London: Macmillan, 1972), 99–116; and Marie A. Martin, “The Rational Warrant for Hume’s General Rules,” *Journal of the History of Philosophy* 31 (1993): 245–57. Also of interest the observations in John Laird, *Hume’s Philosophy of Human Nature* (London: Methuen, 1932), 91–2; André-Louis Leroy, *David Hume* (Paris: Presses Universitaires de France, 1953), 69–72; Lewis White Beck, “A Prussian Hume and a Scottish Kant,” in *Essays on Kant and Hume* (New Haven: Yale University Press, 1978), 111–29, esp. 122ff.; and Annette C. Baier, *A Progress of Sentiments: Reflections on Hume’s “Treatise”* (Cambridge, MA: Harvard University Press, 1991), ch. 3, 54–77.

latter has a more lively conception of all the incidents.
(T97–98).

These two readers embody the difference between entertaining a lively idea, and assenting to it. It is clear that the difference between them lies with the distinction between the liveliness of the ideas—which is obviously the same for both readers—and the liveliness of our conceiving those ideas, which constitutes the difference between the readers’ responses—suspended disbelief, in one case, and actual belief in the other. On the same basis, while “a poetical description may have a more sensible effect on the fancy, than an historical narration” by setting “the object before us in more lively colours” or by collecting “more of those circumstances, that form a compleat image or picture,” it is still the case that “the ideas it presents are different to the feeling from those, which arise from the memory and the judgment”: for all the “seeming vehemence of thought and sentiments” which derives from the liveliness of the contents, there is still “something weak and imperfect” in the conception (T631). Now, this distinction makes very good sense if we regard the two sorts of liveliness as corresponding, respectively, to a forceful movement of the animal spirits, and to their steady and easy flow in the more deeply engraved traces in the brain: as Hume puts it on a different occasion, it is the “ferment of the spirits” as opposed to “their orderly motion” (T423).³² The steady and orderly motion of the animal spirits, we know from Malebranche, Chambers and the others, occurs when they move along the particularly deep and large traces opened up by frequent use. My suggestion is that we regard that orderly motion as corresponding to belief as steadiness, solidity and firmness of conception. If so, it will lead us straight to repeated experience and to custom as the root of all stabilizing and calibrating factors of belief, including “reflexion and general rules.”³³

So tracing Hume’s terminology back to Malebranchian animal economy provides the key for us to interpret its variety. Force and vivacity are features of individual perceptions as such. Steadiness, solidity and firmness, by contrast, depend on repetition and custom, thus linking those individual perceptions to a wider range of experiences; and as such they only belong to individual perceptions insofar as these are members of a class of oft-repeated experiences. The special feeling typical of a believed idea does not depend exclusively on its sentimental intensity, but also on the way in which that idea fits in with the rest of our experience.

³² I am grateful to Peter Kail for suggesting this point. Apart from a couple of appearances of firmness in the text of the *Treatise* (T97, 105, 106 together with “solidity,” “force” and “vivacity” and with “vigour”, 116) the steadiness group is typical of the Appendix. In fact, the parts of the appendix on belief are a translation of the force and vivacity materials in the text into the frame of reference of steadiness. For example, in the text we find that beliefs approach impressions because of the “*vivid and intense conception*” (T119–20), while in the Appendix this is because they “strikes us, as something real and solid” (T627).

³³ It is interesting to remember that in connection with religious belief Hume seems to think that liveliness and vivacity of conception are far from desirable qualities, so that one of the great advantages of ancient polytheistic religions is precisely that they are believed less forcibly—see for instance in *The Natural History of Religion*.

Conclusion

I started this essay by asking how successful was Hume in transforming the physiological idiom of force, vivacity and steadiness into a language for the narration of feeling and experience, and what is the role of this narration within his theory of belief. My answer to the first question is a qualified yes: quite successful. But Hume's theory of belief is, contrary to appearances, very complex. First there is an attempted phenomenological description of believing in the typical Humean introspective style—it is in this connection that Hume uses the force and vivacity terminology borrowed from animal economy. Second, the phenomenological description is substantiated and specified by vignettes derived from common experience and sociality. Taken together, these two combine to produce a surprisingly subtle and insightful picture. The third element of Hume's theory of belief has to do with steadiness and the mechanisms of stabilization and calibration of belief, that is, with reflection and general rules. The basis for these mechanisms is custom. This is probably the aspect which Hume regarded as the least interesting of his work on belief—so for example, when presenting the “Rules by which to judge causes and effects,” he flippantly declares that “here is all the LOGIC I think proper to employ in my reasoning; and perhaps even this was not very necessary, but might have been supply'd by the natural principles of our understanding” (T175). The fact that Hume did not devote much effort to this logic does not, however, diminish the significance of its presence.³⁴ Hume's theory of belief is not simply that believed ideas are strong and lively; the strength and liveliness of believed ideas is no more than the raw sentimental material of belief.

It is evident that animal spirits are of only historical interest. And yet, I think that they do help us to make better sense of a book which is still as lively as Hume's *Treatise*. Hume and his contemporaries assigned the investigations of perceptions, passions and understanding to the “science of man” or “the science human nature.” This intellectual enterprise, which has played such an important part in the genealogy of present-day philosophy, had at the time close links on the one hand with natural history and animal economy or physiology, and on the other with logic and metaphysics. Being a typical expression of this “science of human nature,” Hume's theory of belief is rooted in the natural inquiries as well as in the moral-philosophical discourse of the time. Moreover, the “science of man” as a learned pursuit was on a continuum with the less high-brow forms of interest in human nature which made up the eighteenth-century culture of feeling. A difficult, bulky book such as Hume's *Treatise of Human Nature* was at one extreme of a wide range of writings which included, at the other extreme, sentimental novels and poetry, and in the mid-range brief and elegant essays and moralizing writings.³⁵ It is

³⁴ As pointed out by Baier, *Progress of Sentiments*, 56–57.

³⁵ See my “The Science and Conversation of Human Nature,” in William Clark, Jan Golinski and Simon Schaffer, eds., *The Sciences in Enlightened Europe* (Chicago: University of Chicago Press, 1999), 218–45, and in “Quixotic Confusions and Hume's Imagination”.

well known that the *Treatise* was an uncompromisingly “anatomical” work which hardly contained any “painting” to address the taste and feelings of contemporary “conversable” readers. But it still belongs to that culture insofar as it was those same readers’ understanding that its author was trying to address. So the way Hume presented and justified his views was drastically different from anything a philosopher would now do when addressing a readership of philosophers. In particular, the illustrations and vignettes peppering his pages on belief are not decorative options or mere presentation devices: they actually add to the argument or fine-tune it in crucial ways. Exploring Hume’s treatment of belief by reconstructing the cultural idiom in which it was cast may have strange and contrasting effects. On the one hand, this operation is likely to make Hume’s work appear more alien. But on the other it also uncovers in that work a way of doing philosophy which is well worth redeeming.